



**DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775**

MCO 3700.3A  
MMA-3  
5 Sep 96

MARINE CORPS ORDER 3700.3A

From: Commandant of the Marine Corps  
To: Distribution List

Subj: Astronaut Candidate Selection Program

Encl: (1) Astronaut Candidate Application Format

1. Purpose. To provide eligibility criteria and application procedures for Marines desiring to participate in the Astronaut Candidate Program with the National Aeronautics and Space Administration (NASA).

2. Cancellation. MCO 3700.3.

3. Background. NASA annually recruits astronaut candidates from both the civilian and military communities to support the space shuttle and space station programs. Approximately every two years, NASA board selects pilot and mission specialist astronaut candidates as needed. All positions are located at the Lyndon B. Johnson Space Center in Houston, Texas, and involve a one to two year training and evaluation program. The current Memorandum of Understanding between the DOD, the services, and NASA concerning astronauts governs the detailing of military personnel with NASA. The current tour length is 5 years with possible 1-year extensions. Selected Marines will remain in an active duty status for pay, benefits, leave, and other military matters and can anticipate a return to normal career assignments upon completion of duty with NASA.

a. Pilot Astronauts. Pilot astronauts serve as both space shuttle commanders and pilots. During flight, the commander has onboard responsibility for the vehicle, crew, mission success, and safety of flight. The pilot assists the commander in controlling and operating the vehicle and may perform other payload and specific experiment operations as required.

b. Mission Specialist Astronauts. Mission specialist astronauts will have responsibility for the coordination of operations in the areas of crew activity planning, consumables usage, and experiment and payload operations. Mission

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specialists are required to have a detailed knowledge of shuttle and space station systems, as well as operational characteristics, mission requirements and objectives, and supporting systems and equipment for each of the experiments to be conducted on their assigned missions. Mission specialists may perform extravehicular activities, payload handling using the remote manipulator system, and perform or assist in specific experiment operations.

#### 4. Qualifications of Applicants

##### a. Pilot astronaut candidate minimum qualifications are:

(1) Bachelor's degree from an accredited institution in engineering, biological science, physical science, or mathematics. An advanced degree or equivalent experience is desired. Quality of academic preparation is important.

(2) At least 1,000 hours pilot-in-command time in high performance jet aircraft. Flight test experience is highly desirable.

(3) Ability to pass NASA Class I space flight physical (similar to military flight physicals) to include the following specific standards:

(a) Distant visual acuity: 20/50 or better uncorrected; correctable to 20/20 each eye.

(b) Hearing loss not to exceed:

Frequency	(HZ)	500	1000	2000	4000
Loss - Both Ears	(db)	30	25	25	50
Better Ear		30	30	30	55
Worse Ear		35	50	50	75

(c) Blood pressure: Preponderant systolic not to exceed 140 nor diastolic to exceed 90mm Hg, (140/90) measured in sitting position.

(4) Height between 64 and 76 inches.

(5) Be a U.S. citizen on active duty in the Marine Corps with a minimum of 5 years active service.

##### b. Mission specialist astronaut candidate minimum qualifications are:

(1) Bachelor's degree from an accredited institution in engineering, biological science, physical science, or mathematics. Degree must be supplemented by at least 3 years

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related, progressively responsible, professional experience. An advanced degree is desired and may be substituted for part or all of the experience requirement (master's degree = 1 year, Ph.D. degree = 3 years). Quality of academic preparation is important.

(2) Ability to pass NASA Class II space flight physical (similar to military flight physicals) to include the following specific standards:

(a) Distant visual acuity: 20/200 or better uncorrected; correctable to 20/20 each eye.

(b) Hearing loss and blood pressure: same as for pilot astronaut candidates.

(3) Height between 58.5 and 76 inches.

(4) Be a U.S. citizen on active duty in the Marine Corps with a minimum of 5 years active service.

c. Educational Requirements. Applicants for the Astronaut Candidate Program must meet the basic educational requirements for NASA engineering and scientific positions. Specifically required is successful completion of standard professional curriculum in an accredited college or university leading to at least a bachelor's degree with major study in an appropriate field of engineering, physical science, biological science, or mathematics. The following degree fields, while related to engineering and the sciences are not considered qualifying:

(1) Degrees in Technology; i.e., Engineering Technology, Aviation Technology, Medical Technology, etc.

(2) Degrees in Nursing, Exercise Physiology, Physical Education, etc.

(3) Degrees in Psychology (except Clinical, Physiological, or Experimental Psychology which are considered qualifying).

(4) Degrees in Social Sciences; i.e., Geography, Anthropology, Archaeology, etc.

(5) Degrees in Aviation, Aviation Management, or similar fields.

5. Application Procedures. Active duty Marines must submit applications to the Commandant of the Marine Corps (MMA-3) and not directly to NASA. An application package which contains the

required forms for enclosures to the application must be obtained from the Commandant of the Marine Corps (MMOA-3), DSN 224-5211/

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4278. Applications will submit an administrative action form (NAVMC 10274) in the format of the enclosure.

6. Application Dates. A Marine Corps selection board will convene to select the best qualified applicants. Application dates will be published by separate Marine Corps bulletins in the 3700 series. The Commandant of the Marine Corps (MMOA-3) will forward applications of Marines selected to NASA. Nonselected applications will be destroyed 3 months after ending date of the selection board.

7. Action. Endorsements to applications should include a thorough personal assessment of the applicant's ability to represent the Marine Corps and the potential to succeed as a team player within the highly technological environment of NASA.

8. Reserve Applicability. This Order is not applicable to the Marine Corps Reserve.

  
H. P. OSMAN  
By direction

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**ADMINISTRATIVE ACTION (5216)**  
**NAVMC 10274 (REV. 3-93) (EF)**  
Previous editions will be used  
SN: 0000-00-003-0904 U/I: PADS OF 100

1. ACTION NO.	2. SSIC/FILE NO.
3. DATE	

4. FROM (Grade, Name, SSN, MOS, or CO, Pers. O., etc.)  (APPLICANT)		5. ORGANIZATION AND STATION (Complete address)  (APPLICANT'S ORGANIZATION)	
6. VIA (As required)  (CHAIN OF COMMAND)			
7.  TO: <div style="border: 1px solid black; padding: 5px; display: inline-block;">Commandant of the Marine Corps MMOA-3 Headquarters, U.S. Marine Corps Washington, DC 20380-0001</div>		8. NATURE OF ACTION/SUBJECT  ASTRONAUT CANDIDATE APPLICATION	
		9. COPY TO (As required)	
10. REFERENCE OR AUTHORITY (if applicable)  (a) MCO 3700.3A (b) (CURRENT ALMAR SOLICITING APPLICATIONS)		11. ENCLOSURES (if any)  (1) AS APPLICABLE (SEE PAR. 8 BELOW)	

12. SUPPLEMENTAL INFORMATION (Reduce to minimum wording - type name of originator and sign 3 lines below text)
1. I request to be considered for duty as a space shuttle crewmember with the National Aeronautics and Space Administration.
  2. I volunteer for both the Pilot Astronaut Program and Mission Specialist Astronaut Program, or I volunteer for the Mission Specialist Program only.
  3. Armed Forced Active Duty Base Date (AFADBD):
  4. Academic Background
    - a. Service schools:
    - b. Academic achievements: (submit college transcripts to MMOA-3)
    - c. College(s) Attended
      - (1) College(s), year(s) of graduation, and major/minor.

Enclosure (1)

13. PROCESSING ACTION. (Complete processing action in item 12 or on reverse. Endorse by rubber stamp where practicable.)

- (2) Grade point average
  - Undergraduate:
  - Graduate:

5. Pilot and Instrument Rating (if applicable):

6. Flying Experience (If Applicable)

- a. Total hours:
- b. Total hours within last 12 months:
- c. Test Pilot School and graduation date:

7. Experience/Technical Competence

- a. Postgraduate job experience (degree related):
- b. Experience in aeronautic/space-related fields:

8. The following enclosures are submitted for consideration (as applicable):

- Encl: (1) Optional Application for Federal Employment (OF 612)
- Encl: (2) Report of Medical History (Standard Form 93)
- Encl: (3) Report of Medical Examination (Standard Form 88 filled out by a flight surgeon and dated within six months of the board)
- Encl: (4) Supplemental Medical History (JSC Form 465)
- Encl: (5) Supplemental Information (JSC Form 490)
- Encl: (6) Complete College Transcripts for each degree (legible copy acceptable)
- Encl: (7) Supplemental record of aeronautical experience (JSC Form 603) (pilot applicants only)
- Encl: (8) Pilot Accident History File (obtained by individual request from: Naval Safety Center, Code 501, NAS Norfolk, VA 23511-5796) (pilot applicants only)

ENCLOSURE (1)